

### ABSTRACT

A battery charger system, for use with an injector system, comprises a power supply and a battery pack. The power supply converts AC power to DC power. The battery pack includes a battery and a charging module. The module monitors the operating mode of the injector system. When the  
5 battery pack is disconnected from the injection control unit, the module enables the power supply to charge the battery with DC power. When the battery pack is connected to the injection control unit:  
(A) upon detecting the injector system in an idle mode, the module routes DC power from the power supply to both the battery for charging thereof and the injection control unit for operation thereof; and (B) upon detecting the injector system in a non-idle mode, the module prevents the  
10 power supply from charging the battery and enables the battery to provide DC power to the injection control unit.